

REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.116
U.S. Appln. No. 10/026,553

of Dan et al. (USP 6,148,290). Claims 7, 8, 14, 15, 23 and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Attal (USP 5,860,010) in view of Judge et al. (USP 6,430,570).

For the reasons set forth below, Applicant respectfully traverses the rejections and requests favorable disposition of the application.

Argument

As disclosed and claimed in the present application, and as discussed previously in the Request for Reconsideration filed April 14, 2004, the present invention is directed to a system that addresses at least one specific problem associated with conventional Remote Procedure Calls (RPCs) used, for example, in an automated technical plant. Specifically, RPCs are requests from a program running in one, i.e., "local", machine to a second program running in a second, i.e., "remote", machine. Further, conventional RPCs are synchronous in nature in that the first program running in the local machine is "suspended until the results of the remote procedure [running in the remote machine] are returned." (See, e.g., paragraph [0004] of the published application (2002/0087742)). This type of strict synchronism is problematic since much time is wasted in the local machine while it waits for a reply from the remote machine.

To address the above problem, the claimed invention recited in each of independent claims 1, 11 and 18 provides a mechanism by which a predefinable parameter, specifically identifying a particular call generated in the local machine, is stored in a designated memory device assigned to the local machine. The call is then sent to the remote machine, asynchronously, where the remote program performs the requested function, integrates the

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predefinable parameter into a response and sends response data back to the local machine. The local machine then identifies the predefinable parameter in the response from the remote machine and integrates the response data into the first program of the local machine. Accordingly, synchronization is maintained, that is, the proper response data from the remote machine is matched-up with the appropriate portion of the calling program in the local machine.

Applicant respectfully submits that Attal fails to teach or otherwise suggest all of the above features explicitly recited in the claims. Unlike the invention disclosed and claimed in the instant application, Attal discloses and claims *a programming language that similarly represents programs and data*. (Abstract). As explicitly disclosed in Attal, a language such as this,

is used for the distribution of information and processing in a network management system in accordance with executable messages which ***convey the code to be executed, meaning simultaneously the functions to be applied and the data to which these functions must be applied***, which are asynchronous messages sent through the network in a free format from an interpreter of this language in one machine to another interpreter of this language in another machine, and which moreover authorize a dynamic modification of the code as a function of the data manipulated during the execution and a dynamic migration of different code fragments to the different machines of the management system.

(Col. 2, lines 12-23, emphasis added)

Accordingly, Attal discloses a system where the executable code and the data are asynchronously transferred from a client to a server. Moreover, Attal explicitly denounces a system, such as the one claimed here, where the function is maintained in the server. That is, Attal expressly states,

the idea of the invention consists of using a symbolic programming language conceived essentially to be applied in the artificial intelligence field in the field of distributed data processing. A message in the symbolic

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language is sent from an interpreter running on one machine to another interpreter in another machine, but since this message is an executable or a fragment of an executable, it contains not only data, but also contains the function or functions to be applied to these data, which is different from the RPC mechanism in which the function is local to the server and in which only the data are sent remotely within the framework of a defined protocol between client and server. The function and the data form an executable message sent across the network which provides great flexibility, something that is absolutely unusual in matters of distribution to the extent that the request has a free format, meaning that it is not defined by a protocol or by functions set by the server. In this way, a local machine which has a program can send program fragments for execution in different machines.

(Col. 2, lines 27-46)

Thus, in accordance with Attal, program interpreters are utilized in both the client side and the server side of the communication system so executable program code can be transferred from the client to the server, where it is executed. Attal, therefore, does not teach or suggest, and has no conceivable reason to do so, storing, e.g., in the local device, a predefinable parameter that identifies a particular “call”, or integrating the predefinable parameter in the response data from the remote device.

Response to Examiner’s Response to Previous Arguments

On pages 7 and 8 of the Final Office Action the Examiner responds to Applicant’s previous traversal arguments as set forth, for example, in the Request for Reconsideration filed April 14, 2004. In particular, in paragraph number 34, the responsive discussion asserts that “Attal teaches the exchange of not only data but functions and parameters [as well] between local and remote systems.” Applicant agrees that Attal teaches the transfer of both executable code and data, as discussed above. Applicant submits, however, that this is precisely the reason

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why Attal does not disclose storing a predefinable parameter in the local system that identifies the call sent by the first program of the local system or integrating the predefinable parameter into the response data sent by the remote system back to the local system.

In paragraph number 36, the responsive discussion asserts that “Attal discloses that the interaction between a requesting component and information supplying component is obtained by means of messages sent between the two components.” Applicant does not disagree that there is a “message” sent from the local system to the remote system. As discussed above the message sent includes executable code and any attendant data. Further, Applicant realizes that data is sent back to the local system from the remote system in response to the “message”. Applicant submits, however, that because the executable code is sent from the local system to the remote system in Attal, there is no need, and Attal does not suggest such, for the local system to store a predefinable parameter that identifies a particular call so that data returned from the called remote system can be synchronized with the calling program within the local system.

Lastly, in paragraph number 38, the responsive discussion asserts that “Attal discusses an object manager that supplies information to an application emitting a request” and that “the integrator will communicate via an interface with a component which manages the attribute values of a managed object from the management information base” and that the “attribute values are predefinable parameters” as claimed. Applicant respectfully disagrees. More particularly, the disclosed attribute values of the managed information base (MIB) are not *stored and used to identify a call*, as recited in the claims. To the contrary, the attribute values disclosed in Attal are merely values associated with different managed objects (Col. 7, lines 50-

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51) and they are not stored in a memory or data base, they are retrieved by requesting the specific “piece of information from a component which can supply the required information.” (Col. 7, lines 3-7). Thus, attribute values have nothing to do with “predefinable parameters” as disclosed and claimed in the present application.

For at least the above reasons, Applicant strongly submits that Attal fails to teach or suggest the claimed subject matter of independent claims 1, 11 and 18 and, accordingly, the §102 rejection of these claims, as well as the rejection of claims 2, 3, 9, 10, 12, 16, 17, 19 and 20, each of which depends from one of claims 1, 11 and 18, should be withdrawn. Additionally, since none of the other prior art references of record, i.e., King, Dan et al. and Judge et al., compensate for the deficiencies of Attal, the §103 rejection of claims 4-8, 13-15 and 21-24, which depend from claims 1, 11 and 18, respectively, should also be withdrawn.

Conclusion

In view of the foregoing remarks, the application is believed to be in form for immediate allowance with claims 1-24, and such action is hereby solicited. If the Examiner is unable to allow the present application in the next Official Action, an interview is requested. In this event, the Examiner should contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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